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A New Apterous *Lathrobium* (Coleoptera, Staphylinidae) from the Island of Dôgo of the Oki Islands off Western Honshu, Japan

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Abstract A new apterous species of the staphylinid genus *Lathrobium* is described under the name of *L.* (s. str.) *okiense*. It was extracted by a Tullgren funnel from leaf-litter accumulated in broadleaved forests, mainly consisting of evergreen trees, on the Island of Dôgo of the Oki Islands, West Japan.

The group of *Lathrobium* (s. str.) *monticola* is distinguishable from the other apterous members of the genus *Lathrobium* of Japan by the small body without positive sexual characters of abdominal sternites in the male. The second author obtained a number of specimens of an apterous *Lathrobium* from several localities on the Island of Dôgo of the Oki Islands off western Honshu, Japan. These specimens are recognized as a single species which seems to be a member of the group of *L. monticola* in having small body and similar configuration of the 8th abdominal sternite in the male. After a careful examination, it has become clear that it is new to science on account of disagreement in the configuration of the male genital organ with those of the previously known species. Therefore, we are going to describe the new species in the present paper. The type specimens are deposited in the collection of the Laboratory of Insect Resources, Tokyo University of Agriculture, except for a pair of paratypes in the collection of the Oki Natural History Museum.

Before going further, we would like to express our hearty thanks to Dr. Shun-Ichi Uéno, Visiting Professor at Tokyo University of Agriculture, for his kindness in giving us valuable advice on the present study. Deep gratitude is also due to Mr. Koji Arai, Ranzan-machi, Saitama, for his assistance in drawing the figures (Figs. 1 & 2) inserted in this paper, and Mr. Koji Yawata, Saigô-chô, Dôgo Is., for his kind help in field works by the second author.

Lathrobium (s. str.) ***okiense*** Y. WATANABE et SHIMADA, sp. nov.

[Japanese name: Oki-kuro-chibikobane-nagahanekakushi]

(Figs. 1–8)

Body length: 5.9–6.5 mm (from front margin of head to anal end); 2.7–2.9 mm (from front margin of head to elytral apices).

Body elongate, almost parallel-sided and depressed above. Colour brownish black and shining, with mandibles and antennae reddish brown, though the latter is somewhat paler in apical four or five segments, palpi and legs brownish yellow, abdomen reddish brown except for two apical segments which are brownish yellow, and elytra

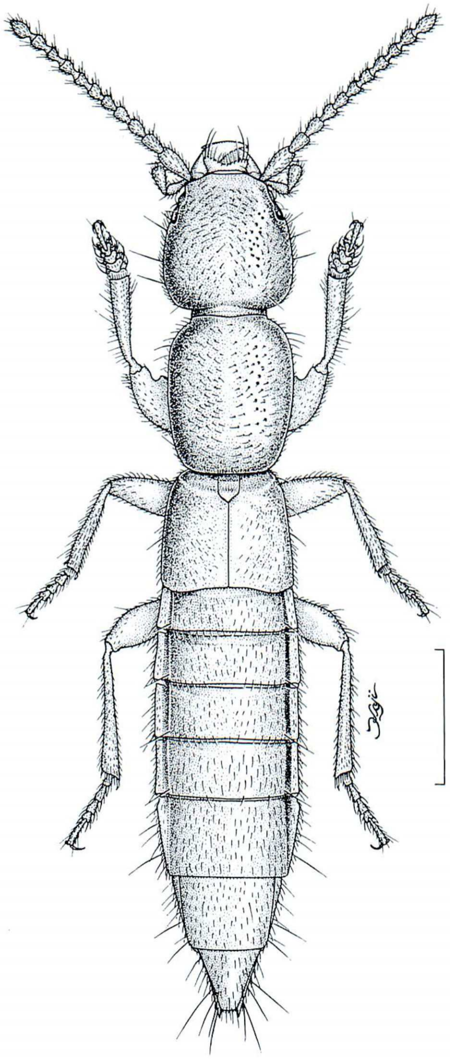


Fig. 1. *Lathrobium* (s. str.) *okiense* sp. nov., holotype, from Washi-ga-mine of the Island of Dôgo of the Oki Islands, Japan. Scale: 1.0 mm.

sometimes reddish brown in sutural and apical parts.

Male. Head subtrapezoidal, distinctly narrowed anteriad and somewhat convex, slightly transverse (width/length=1.06); lateral side gently arcuate, frontal area flattened and glabrous along frontal margin, provided with a large setiferous puncture inside each antennal tubercle; surface sparingly, coarsely and setiferously punctured, the punctures becoming closer and less coarse in temporal areas, and covered with fine coriaceous ground sculpture all over; eyes minute and flat, each longitudinal diameter about one-fifth as long as postocular part. Antennae elongate, extending a little beyond the middle of pronotum, not thickened towards the apical segment, 6th to 10th segments more or less moniliform, two proximal segments polished, 3rd subopaque and the remainings opaque; 1st robust and strongly dilated apicad, more than twice as long as broad, 2nd constricted at the base, 1.5 times as long as broad, a half as long as and distinctly narrower (2nd/1st=0.73) than 1st, 3rd equal to 2nd in both length and width, 4th to 10th almost equal to one another in both length and width, each a little longer than broad (length/width=1.18) though somewhat shorter (each of 4th to 10th/3rd=0.75) and slightly narrower (each of 4th to 10th/3rd=0.95) than 3rd, 11th fusiform, nearly twice as long as broad and distinctly longer (11th/10th=1.56) than though as broad as 10th, subacuminate at the tip.

Pronotum oblong though slightly narrowed posteriad, more convex than head, clearly longer than broad (length/width=1.22), distinctly longer (pronotum/head=1.22) though as broad as or slightly narrower (pronotum/head=0.95) than head; lateral sides almost straight except near anterior and posterior angles, anterior margin truncate or slightly emarginate at the middle, posterior margin almost straight, anterior angles obtuse and not visible from dorsal side, posterior ones narrowly rounded; surface more finely and more numerously punctured than in vertexal area of head except for a narrow smooth median space through the length of pronotum. Scutellum subtriangular and provided with a few small setiferous punctures on the surface. Elytra subtrapezoidal and dilated posteriad, somewhat transverse (width/length=1.19), distinctly

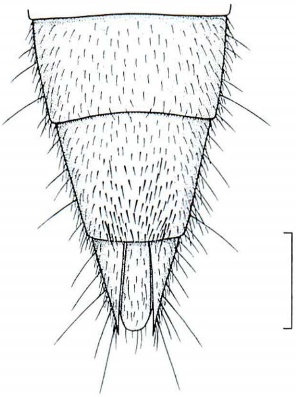


Fig. 2. Last three abdominal sternites in male of *Lathrobium* (s. str.) *okiense* sp. nov. Scale: 0.5 mm.

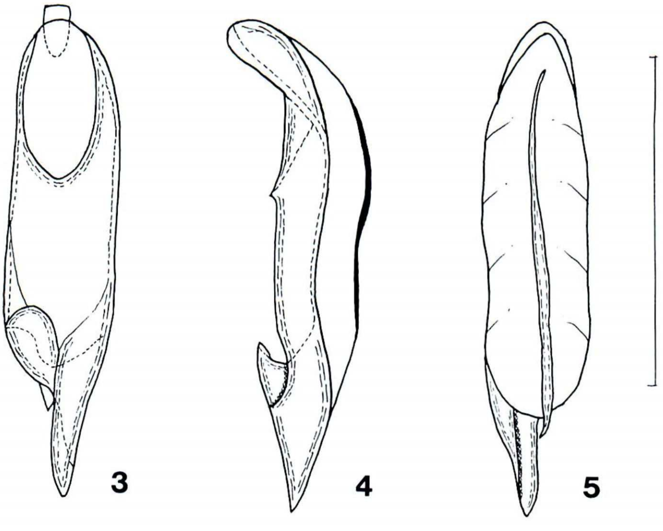
shorter (elytra/pronotum=0.73) though slightly broader (elytra/pronotum=1.06) than pronotum; lateral sides weakly arcuate, posterior margin broadly emarginate at the middle, posterior angles rounded; surface closely, superficially punctured and covered with fine brownish pubescence. Legs moderately long; profemora, protibiae and protarsi similar in structure to those of the members of the group of *L. monticola*.

Abdomen elongate, almost parallel-sided from 3rd to 7th segments, and then abruptly narrowed towards the anal end; each tergite sparingly, minutely and superficially punctured, and covered with fine brownish pubescence similar to those on elytra; 8th sternite almost straight at the middle of posterior margin, surface slightly flattened at the median area in posterior half, the flattened area sparingly provided with short blackish setae; 7th sternite slightly, broadly emarginate at the middle, surface similar to that of 6th sternite.

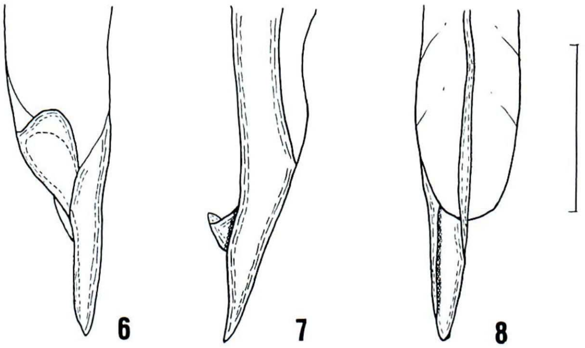
Genital organ elongate and sclerotized except for the ventral side of median lobe. Median lobe nearly parallel-sided and broadly rounded at the apical margin, provided with a remarkable elongate sclerite on the ventral side along the median line. Fused paramere asymmetrical, considerably longer than median lobe, and abruptly narrowed in apical fourth as seen from dorsal side, strongly hollowed at apical fifth in profile.

Female. Similar in facies to male, but different from it in the 8th abdominal sternite narrowed towards the rounded apex.

Type series. Holotype: ♂, allotype: ♀, Washi-ga-mine, Fuse-mura, Dôgo Is., Oki Isls., Shimane Pref., Japan, 7–XI–2003, T. SHIMADA leg. Paratypes: 1♂, 1♀, same data as for the holotype, 10♂♂, 3♀♀, same locality and collector as for the holotype, 25–III–2004; 1♂, Higashi-dani, Saigô-chô, Dôgo Is., Oki Isls., Shimane Pref., Japan,



Figs. 3–5. Male genital organ of *Lathrobium* (s. str.) *okiense* sp. nov.; dorsal view (3), lateral view (4), and ventral view (5). Scale: 0.5 mm.



Figs. 6–8. Apical part of the male genital organ of *Lathrobium* (s. str.) *okiense* sp. nov., from near Kanbi-Tunnel of Saigô-chô of the Island of Dôgo of the Oki Islands; dorsal view (6), lateral view (7), and ventral view (8). Scale: 0.25 mm.

7–XI–2003, T. SHIMADA leg.

Further specimens examined. 2♂♂, 5♀♀, Tsudo, Tsuma-mura, Dôgo Is., Oki Isls., Shimane Pref., Japan, 11–II–2004, T. SHIMADA leg.; 1♂, 1♀, near Kanbi-Tunnel, Saigô-chô, Dôgo Is., Oki Isls., Shimane Pref., Japan, 2–IX–2003, T. SHIMADA leg.; 4♀♀, Kanbi, Saigô-chô, Dôgo Is., Oki Isls., Shimane Pref., Japan, 11–II–2004, T. SHIMADA leg.

The specimens obtained at Tsudo and Kanbi in Fuse-mura are somewhat different from the type specimens in slightly larger body (6.2–6.8 mm) and narrower apical part of fused paramere of the male genital organ, but the difference can be regarded as infraspecific variation.

Distribution. Japan (Dôgo Is. of the Oki Islands).

Bionomics. The type specimens obtained on Washi-ga-mine were extracted by a Tullgren funnel from leaf-litter accumulated in a broadleaved forest, consisting of *Quercus crispula*, *Rhododendron degronianum* var. *okiense* and *Thuja standishii*, at an altitude of about 550 m. One paratype was also extracted by a Tullgren funnel from leaf-litter accumulated in a broadleaved forest of Higashi-dani in Saigô-chô at an altitude of about 280 m.

Remarks. The present new species is similar in body size and facies to *L. monticola* SHARP (1889, p. 255), but is distinguishable from it by the following points: head more strongly narrowed anteriad, surface more closely punctured and covered with much coarser ground sculpture; pronotum more convex, more closely and more coarsely punctured; elytra more coarsely punctured; abdomen much more sparingly and more superficially punctured, and the male genital organ remarkably different in configuration. Similar also to *L. masaoi* Y. WATANABE (1999, p. 109) from Mt. Wasamata-yama of Nara Prefecture, in the 8th abdominal sternite in male, but different from it in the configuration of the male genital organ.

Etymology. The specific epithet of this new species is derived from the "Oki Is-

lands", in which lies the type locality (Dôgo Is.)

要　約

渡辺泰明・島田　孝：隠岐諸島の島後から採集された*Lathrobium monticola*種群の1新種．—— *L. monticola*種群は，雄の腹部第8腹板に顕著な第二次性徴が認められないことで，他の後翅の退化したナガハネカクシ種群から容易に区別される．筆者の一人，島田が隠岐諸島の島後で採集したこの種群の1種を検討した結果，未記載種と判定したので下記のとおり命名・記載した．記載に用いた基準標本は，すべて島後の標高550 m地点の，主として照葉樹で形成されている広葉樹林内に堆積した落葉ないし腐植をツルグレンファンネルを用いて抽出したものである．

Lathrobium (s. str.) *okiense* Y. WATANABE et SHIMADA オキクロチビコバネナガハネカクシ

本種は体長，色彩および外部形態が*L. monticola*に類似しているが，頭部および前胸背板はより密に，翅鞘はより粗く，腹部の各背板は，はるかに疎で浅く点刻されること，また雄交尾器の形状が著しく異なっていることで容易に区別される．

なお，西郷町神尾（標高30～50 m）と都万村津戸（標高25 m）から得られた個体は，基準標本より体がわずかに大きく(6.2～6.8 mm)，雄交尾器側葉末端域がより細長いが，これらは同一種内の変異と判断された．

References

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